$\frac{N.x}{v} = k \Rightarrow N = \frac{k.v}{x}$; AN N=k$\frac{0,4}{10.10^{-3}} = 40k$

$20 \le N \le 100$

$20 \le 40k \le 100$

$0,5 \le k \le 2,5$

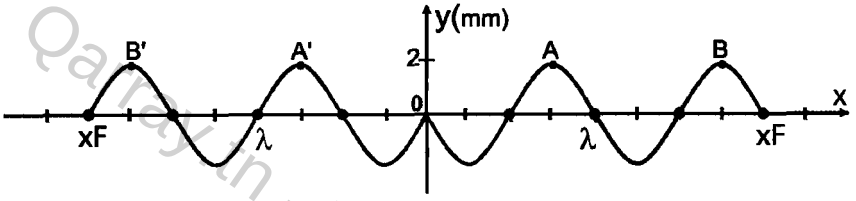
$k = \{1,2\}$

K	1	2
N(Hz)	40	80

5) a-D'après la courbe C_2 à $t_1 = 4.10^{-2} s$

$y_M = -2mm \Rightarrow M \in$ *une ride creuse*

b- $x_F = V.t_1 = 0,4 \times 4.10^{-2} = 16.10^{-3} m$



$\frac{x_F}{\lambda} = \frac{16.10^{-3}}{8.10^{-3}} = 2 \Rightarrow x_F = 2\lambda$

c- A, B, A′, B′ vibrent en quadrature avance de phase par rapport à S.

Point	A′	B′	A	B
x(mm)	-14	-6	6	14

d- $\varphi_M - \varphi_S = \frac{\pi}{2} - 2k\pi$

$\frac{-2\pi x}{\lambda} = \frac{\pi}{2} - 2k\pi$

$\frac{2x}{\lambda} = -\frac{1}{2} + 2k\pi$

$x = (k - \frac{1}{4})\lambda$ $k \in \mathbb{N}^*$

$0 \le x \le x_F$

Qarray.tn -Aqra Blech- Qarray.tn